APPENDIX 4: Abbreviations and Acronyms

5-ASA 5-aminosalicylic acid 5HT 5-hydroxytryptamine

ABCA1 ATP-binding cassette, subfamily A, member 1 ABCG5/G8 ATP-binding cassette transporters G5 and G8

ACTH adrenocorticotropic hormone

AIDS acquired immunodeficiency syndrome

AIEC adherent invasive *E. coli*AIH autoimmune hepatitis
AIP autoimmune pancreatitis

ALADIN alacrima-achalasia-adrenal insufficiency neurologic disorder protein

AMP adenosine monophosphate
APC adenomatosis polyposis coli
APJ apical junctional complex

ApoB apolipoprotein B ApoE apolipoprotein E

APRIL a proliferation inducing ligand

ATG16L1 ATG16 autophagy related 16-like 1 protein

BAFF B cell-activating factor of the tumor necrosis factor family

BMP bone morphogenic protein

BRCA2 breast cancer type 2 susceptibility protein

CCK cholecystokinin
CCR3 chemokine receptor 3
CD Crohn's disease

CD1/CD25/CD40 cluster of differentiation molecules

CDX2 caudal-related homeobox 2

CF cystic fibrosis

CFTR cystic fibrosis transmembrane conductance regulator

CI colon ischemia

CIMP CpG island methylator phenotype

CNS central nervous system COX cyclooxygenase

CRF corticotropin-releasing factor
CRH corticotropin-releasing hormone

CT computed tomography

DC dendritic cells

DDICC Digestive Diseases Interagency Coordinating Committee

DDLT deceased donor liver transplant DGAT diacylglycerol acetyltransferase

DHHS U.S. Department of Health and Human Services

DNA deoxyribonucleic acid EAEC enteroaggregative E. coli

EGID eosinophilic gastrointestinal disorders

EGJ esophagogastric junction
ENS enteric nervous system
EPEC enteropathogenic *E. coli*ER endoplasmic reticulum

Opportunities and Challenges in Digestive Diseases Research: Recommendations of the National Commission on Digestive Diseases

ERCP endoscopic retrograde cholangio-pancreatography

EUS endoscopic ultrasound
FABP fatty acid binding protein
FAP familial adenomatous polyposis
FATP fatty acid transport protein

FDA U.S. Food and Drug Administration

FDG-PET 2-[¹⁸F] fluoro-2-deoxy-D-glucose positron emission tomography

FGF fibroblast growth factor FIC Fogarty International Center

fMRI functional magnetic resonance imaging FoxP3 forkhead box P3 transcription factor

FXR farnesoid X receptor

GABAB gamma-aminobutyric acid B receptor GERD gastroesophageal reflux disease Gfi growth factor independence protein

GI gastrointestinal

GIP glucose-dependent insulinotropic polypeptide

GIST gastrointestinal stromal tumor GLP-2 glucagon-like peptide-2

HBV hepatitis B virus

HCC hepatocellular carcinoma

HCV hepatitis C virus

HDL high-density lipoprotein HEV hepatitis E virus

HFE hemochromatosis gene

HIV human immunodeficiency virus HLA human leukocyte antigen

HNPCC hereditary nonpolyposis colorectal cancer

hPEPT1 human peptide transporter 1
IBD inflammatory bowel disease
IBS irritable bowel syndrome
ICC interstitial cells of Cajal

ICD International Classification of Diseases

IgA immunoglobulin A IgG immunoglobulin G

IGF-1 insulin-like growth factor-1

IL interleukin

Insig-1 insulin-induced gene 1

IPMN intraductal papillary mucinous neoplasm

ISC intestinal stem cell

LDLT living donor liver transplant LES lower esophageal sphincter

Lgr5 leucine-rich repeat-containing G-protein coupled receptor 5

LRR leucine-rich repeat LXR liver X receptor

MAdCAM-1 mucosal addressin cell adhesion molecule 1

Math-1 mouse atonal homolog 1

MALT mucosa associated lymphoid tissue

MCN mucinous cystic neoplasm
MCT monocarboxylate transporter
Mdr2 multiple drug resistance 2

Opportunities and Challenges in Digestive Diseases Research: Recommendations of the National Commission on Digestive Diseases

MELDModel for End-Stage Liver DiseaseMEN 1multiple endocrine neoplasia type 1MGATmannoside acetylglucosaminyltransferase

MLCK myosin light chain kinase

MMR mismatch repair

MRI magnetic resonance imaging

MRP2 multidrug resistance-associated protein family

MSC mesenchymal stem cell

MYH Mut Y homolog

NASH non-alcoholic steatohepatitis

NCCAM National Center for Complementary and Alternative Medicine

NCI National Cancer Institute

NCMHD National Center on Minority Health and Health Disparities

NCRR National Center for Research Resources

NEC necrotizing enterocolitis
NERD non-erosive reflux disease
NF-κB Nuclear Factor kappa-B

NHGRI National Human Genome Research Institute
NHLBI National Heart, Lung, and Blood Institute

NIA National Institute on Aging

NIAAA National Institute on Alcohol Abuse and Alcoholism NIAID National Institute of Allergy and Infectious Diseases

NIBIB National Institute of Biomedical Imaging and Bioengineering

NICHD Eunice Kennedy Shriver National Institute of Child Health and Human

Development

NIDA National Institute on Drug Abuse

NIDCR National Institute of Dental and Craniofacial Research

NIDDK National Institute of Diabetes and Digestive and Kidney Diseases

NIEHS National Institute of Environmental Health Sciences

NIH National Institutes of Health
NIMH National Institute of Mental Health

NINDS National Institute of Neurological Disorders and Stroke

NINR National Institute of Nursing Research

NK natural killer NKT natural killer T cell

NO nitric oxide

NOTES natural orifice transluminal endoscopic surgery

NPC1L1 Niemann-Pick C1 Like 1 protein NSAID non-steroidal anti-inflammatory drug

NSC neural stem cell

OD NIH Office of the Director

OPASI Office of Portfolio Analysis and Strategic Initiatives

ORS oral rehydration solution

PanIN pancreatic intraepithelial neoplasia

PBC primary biliary cirrhosis
PCR polymerase chain reaction

PDC-E2 pyruvate dehydrogenase complex-E2

PDGFRA platelet-derived growth factor receptor, alpha polypeptide

PELD Pediatric End-Stage Liver Disease PET positron emission tomography

PN parenteral nutrition

Opportunities and Challenges in Digestive Diseases Research: Recommendations of the National Commission on Digestive Diseases

PPAR peroxisome proliferator-activated receptor

PPI proton pump inhibitor

PSC primary sclerosing cholangitis PTEN phosphatase and tensin homolog

PUD peptic ulcer disease

PYY peptide YY

RAR retinoic acid receptor

rDNA ribosomal deoxyribonucleic acid

RNA ribonucleic acid

Runx3 runt-related transcription factor 3

RV rotavirus

SBP spontaneous bacterial peritonitis

SBS short bowel syndrome

Scap SREBP cleavage-activating protein

SCFA short chain fatty acids

SERT serotonin reuptake transporter siRNA small interfering ribonucleic acid SNP single nucleotide polymorphism

SPECT single photon emission computed tomography

SPINK1 serine protease inhibitor, Kazal type 1

SQUID superconducting quantum interference device SREBP sterol-regulatory element binding protein

STAT3 signal transducer and activator of transcription 3

STEP serial transverse enteroplasty

TE/RM tissue engineering/regenerative medicine

TFF trefoil factor

TGF transforming growth factor

TIMP tissue inhibitor of metalloproteinases

TLR Toll-like receptor
TNF tumor necrosis factor

TRPV1 transient receptor potential vanilloid 1

TSLP thymic stromal lymphopoietin

UC ulcerative colitis

VEGF vascular endothelial growth factor

ZES Zollinger-Ellison syndrome